Statistical Tables

**for Science, Engineering,
Management and
Business Studies**

*Third edition
Revised and expanded*

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Preface

With this edition we have taken the opportunity to expand the range of tables. The new tables cover some non-parametric tests as well as other areas which we have found to be useful.

The non-parametric tests include both Nair's and Dixon's tests for identifying whether an outlying observation in a sample is sufficiently extreme to consider discarding it. Tables are provided of Spearman's and Kendall's Rank Correlation Coefficients and of the one-sample Kolmogorov-Smirnov statistics for goodness of fit.

We have also added a table of Tukey's Wholly Significant Difference – a test of importance in understanding and interpreting the practical significance of the results of analysis of variance.

We have also given examples of the use of all the new tables just mentioned.

There is now a table of the simplified factors using the American practice for constructing control charts for sample average and sample range. As a final addition, we have included a set of useful formulae together with the parameters of the most commonly used statistical distributions.

For a more detailed description on the use of the original tables, including those of random numbers, as well as for specialist statistical tabulations, reference should be made to well-known publications such as the Biometrika Tables for Statisticians and those of Fisher and Yates. As a cautionary note and since there is no universal convention for the tabulation of statistical functions, users unfamiliar with these tables should be careful to check the actual function which is tabulated. For example, many tabulations of the percentage points of the t-distribution split the probability equally between both tails of the distribution and quote $|t|$ as the value of t exceeded with the given probability, whereas Table 7 of this edition gives the value of $+t$ which cuts off the indicated probability in the right-hand tail of the distribution only.

The authors would like to thank their colleague, Mr W. Schroeder, for his development of computer programs to calculate percentage points of χ^2 (Table 8) and the tables of discount factors (Tables 39, 40 and 41).

Finally, the authors are indebted to the Literary Executor of the late Sir Ronald A. Fisher, F.R.S., Cambridge, to Dr Frank Yates, F.R.S., Rothamsted, and to Messrs. Oliver and Boyd Ltd., Edinburgh, for permission to reprint all or part of Tables III, IV, V and XXXIII from their book 'Statistical Tables for Biological, Agricultural and Medical Research', to the Biometrika Trustees for permission to reprint parts of Tables 8 and 9 from 'Biometrika Tables for Statisticians, Volume 1', and also the British Standards Institution for permission to reprint some tables from B.S. 2564: 1955 and from the withdrawn British Standard B.S. 600R:1942. Every effort has been made to trace all the copyright holders but if any have been inadvertently overlooked the publishers will be pleased to make the necessary arrangement at the first opportunity.

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